

Access DB# 99583

SEARCH REQUEST FORM

Scientific and Technical Information Center

Requester's Full Name: Jeffrey E. Russell Examiner #: 62785 Date: 7-23-2003
An Unit: 1654 Phone Number 308-2977 Serial Number: 10/032,330
Mail Box and Bldg/Room Location: _____ Results Format Preferred (circle): PAPER DISK E-MAIL
CM1-11013/CM1-1807

If more than one search is submitted, please prioritize searches in order of need.

Please provide a detailed statement of the search topic, and describe as specifically as possible the subject matter to be searched. Include the elected species or structures, keywords, synonyms, acronyms, and registry numbers, and combine with the concept or utility of the invention. Define any terms that may have a special meaning. Give examples or relevant citations, authors, etc., if known. Please attach a copy of the cover sheet, pertinent claims, and abstract.

Title of Invention: Tissue RemodelingInventors (please provide full names): S. Ben-SassonEarliest Priority Filing Date: 12-31-2001

For Sequence Searches Only Please include all pertinent information (parent, child, divisional, or issued patent numbers) along with the appropriate serial number.

Please search STN for peptides which comprise 4 or more contiguous residues of SEQ ID No: 21 (GGIVEEYQLPY).

Thank you.
JER

If you get too many hits, please use a length limitation of 25, or use the keywords bone, osteoporosis, fatty acid, acylat?

Point of Contact
P. Shappard
Telephone number: (703) 308-4499

STAFF USE ONLY

| | Type of Search | Vendors and cost where applicable |
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| Searcher: _____ | NA Sequence (#) _____ | STN: _____ |
| Searcher Phone #: _____ | AA Sequence (#) _____ | Dialog: _____ |
| Searcher Location: _____ | Structure (#) _____ | Questel: Other: _____ |
| Date Searcher Presentation: _____ | Bibliographic: _____ | Or Link: _____ |
| Date Completed: <u>7/28/03</u> | Litigation: _____ | Lexis Nexis: _____ |
| Searcher Prep & Review Time: _____ | Fulltext: _____ | Sequence Systems: _____ |
| Client Prep Time: _____ | Patent Family: _____ | WWW Internet: _____ |
| Final Time: _____ | Other: _____ | Other Indicators: _____ |

PT 1-490-11013

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FILE COVERS 1907 - 28 Jul 2003 VOL 139 ISS 5
 FILE LAST UPDATED: 27 Jul 2003 (20030727/ED)

This file contains CAS Registry Numbers for easy and accurate substance identification.

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 L1 42629 SEA FILE=REGISTRY ABB=ON PLU=ON GGIV|IVEE|VEEY|EEYQ|EYQL|YQLP
 |QLPY/SQSP
 L3 339 SEA FILE=REGISTRY ABB=ON PLU=ON L1 AND SQL<=25
 L4 50431 SEA FILE=REGISTRY ABB=ON PLU=ON BONE OR FATTY(W)ACID? OR
 ACYLAT?
 L7 686265 SEA FILE=HCAPLUS ABB=ON PLU=ON L4 OR BONE OR FATTY(W)ACID?
 OR ACYLAT? OR OSTEOPOROS?
 L10 187 SEA FILE=HCAPLUS ABB=ON PLU=ON L3
 L12 20 SEA FILE=HCAPLUS ABB=ON PLU=ON L10 AND L7

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L12 ANSWER 1 OF 20 HCAPLUS COPYRIGHT 2003 ACS on STN
 ACCESSION NUMBER: 2003:306849 HCAPLUS
 DOCUMENT NUMBER: 138:332694
 TITLE: Polymorphism identification within 50 equine
 gene-specific sequence tagged sites. [Erratum to
 document cited in CA136:211522]
 AUTHOR(S): Shubitowski, D. M.; Venta, P. J.; Douglass, C. L.;
 Zhou, R.-X.; Weart, S. L.
 CORPORATE SOURCE: Department of Large Animal Clinical Sciences, Michigan
 State University, East Lansing, MI, 48824, USA
 SOURCE: Animal Genetics (2001), 32(5), 332
 CODEN: ANGE3; ISSN: 0268-9146
 PUBLISHER: Blackwell Science Ltd.
 DOCUMENT TYPE: Journal
 LANGUAGE: English
 AB One sequence (GenBank AY008814) was misidentified as being part of the
 equine sex-detg. region gene (SRY). The correct identity of the sequence
 is as part of the sex-detg. region Y box 30 gene (SOX30).
 IT 402741-21-3 402809-83-0

RL: BSU (Biological study, unclassified); PRP (Properties); BIOL
(Biological study)
(amino acid sequence; polymorphism identification within 50 equine
gene-specific sequence tagged sites (Erratum))

L12 ANSWER 2 OF 20 HCAPLUS COPYRIGHT 2003 ACS on STN
ACCESSION NUMBER: 2002:850307 HCAPLUS
DOCUMENT NUMBER: 137:346244
TITLE: Tissue remodeling with compds. comprising a sequence
from TGF-.beta. super family Ser/Thr/kinase receptors
INVENTOR(S): Ben-Sasson, Shmuel
PATENT ASSIGNEE(S): Children's Medical Center Corporation, USA
SOURCE: U.S. Pat. Appl. Publ., 51 pp., Cont.-in-part of Appl.
No. PCT/US00/32852.
CODEN: USXXCO
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 3
PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---------------|------|----------|-----------------|----------|
| US 2002165150 | A1 | 20021107 | US 2001-32330 | 20011231 |
| WO 2001042280 | A2 | 20010614 | WO 2000-US32852 | 20001204 |
| WO 2001042280 | A3 | 20020307 | | |

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,
CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR,
HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT,
LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU,
SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN,
YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY,
DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF,
BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG

PRIORITY APPLN. INFO.: US 1998-161094 B2 19980925
WO 2000-US32851 W 20001204
WO 2000-US32852 A2 20001204
US 1999-458491 A1 19991209

AB The invention concerns a method for the modulation of tissue-remodeling
processes, by contacting the tissue to be remodeled with a compd.
comprising a sequence derived from certain regions of TGF-.beta. super
family Ser/Thr/kinase receptors.

IT 332350-87-5, BMP receptor kinase-2
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(tissue remodeling with compds. comprising a sequence from TGF-.beta.
super family Ser/Thr/kinase receptors)

IT 474526-71-1 474526-72-2 474526-73-3
474526-78-8 474526-96-0 474526-98-2
474527-06-5
RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL
(Biological study); USES (Uses)
(tissue remodeling with compds. comprising a sequence from TGF-.beta.
super family Ser/Thr/kinase receptors)

L12 ANSWER 3 OF 20 HCAPLUS COPYRIGHT 2003 ACS on STN
ACCESSION NUMBER: 2002:691570 HCAPLUS
DOCUMENT NUMBER: 137:196722
TITLE: cDNA and protein sequence of a novel human actin
related-protein ARP sequence homolog protein 32 and
their uses in drug screening, diagnosis and
therapeutics
INVENTOR(S): Mao, Yumin; Xie, Yi
PATENT ASSIGNEE(S): Bode Gene Development Co., Ltd., Shanghai, Peop. Rep.

SOURCE: China
Faming Zhuanli Shenqing Gongkai Shuomingshu, 36 pp.
CODEN: CNXXEV
DOCUMENT TYPE: Patent
LANGUAGE: Chinese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------------------------|------|----------|-----------------|----------|
| CN 1328038 | A | 20011226 | CN 2000-116455 | 20000612 |
| PRIORITY APPLN. INFO.: | | | CN 2000-116455 | 20000612 |

AB This invention provides the cDNA and protein sequence of a novel human actin related-protein ARP sequence homolog protein 32 cloned from fetal brain. The mol. wt. of protein 32 is 32 kDa detd. on SDS PAGE and the sequence of protein 32 has homol. with that of actin related-protein ARP. The invention discloses the process of screening the agonist and antagonist against the polypeptide. The protein 32 can be used to diagnosis and treatment for many actin related-protein ARP assocd. diseases such as blood diseases, bone and vessel development disorders, kidney diseases, inflammation and immune diseases.

IT 452093-05-9

RL: PRP (Properties)

(unclaimed sequence; cDNA and protein sequence of a novel human actin related-protein ARP sequence homolog protein 32 and their uses in drug screening, diagnosis and therapeutics)

L12 ANSWER 4 OF 20 HCAPLUS COPYRIGHT 2003 ACS on STN

ACCESSION NUMBER: 2002:575193 HCAPLUS

DOCUMENT NUMBER: 137:139362

TITLE: Human antibodies and fragments derived from phage display library for selective cancer therapy and diagnosis.

INVENTOR(S): Hagai, Yocheved; Lazarovits, Janette; Guy, Rachel; Lipschitz, Orly; Szanton, Esther; Levanon, Avigdor; Plaksin, Daniel; Peretz, Tuvia

PATENT ASSIGNEE(S): Bio-Technology General Corp., USA

SOURCE: PCT Int. Appl., 232 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 2

PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---------------|------|----------|-----------------|----------|
| WO 2002059264 | A2 | 20020801 | WO 2001-US49440 | 20011231 |
| WO 2002059264 | A3 | 20030306 | | |

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM

RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

PRIORITY APPLN. INFO.: US 2000-751181 A1 20001229

AB The present invention is directed to a peptide or polypeptide comprising an Fv mol., a construct thereof, a fragment of either, or a construct of a fragment having enhanced binding characteristics so as to bind selectively and/or specifically to a target cell in favor of other cells, wherein the

binding selectivity or specificity is primarily detd. by a first hypervariable region, and wherein the Fv is a scFv or a dsFv, and optionally having one or more tags. The enhanced binding is directed to a substantially exposed and/or over-expressed binding site on or in a target comprising a cell in favor of other cells on or in which the binding site is not substantially available and/or expressed. The invention is further directed to a method for isolating such peptides and polypeptides from a phage display library and to the nucleic acid mols. encoding them. The invention provides for a pharmaceutical compn. comprising the peptide or polypeptide and kits for diagnosis and treatment of disease, specifically cancer, most specifically acute myeloid leukemia.

IT 442527-58-4P

RL: BPN (Biosynthetic preparation); BSU (Biological study, unclassified); DGN (Diagnostic use); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(human antibodies and fragments derived from phage display library for selective cancer therapy and diagnosis)

L12 ANSWER 5 OF 20 HCAPLUS COPYRIGHT 2003 ACS on STN

ACCESSION NUMBER: 2002:382316 HCAPLUS

DOCUMENT NUMBER: 137:16533

TITLE: Human genome-derived single exon nucleic acid probes useful for analysis of gene expression in human lung
INVENTOR(S): Penn, Sharron G.; Hanzel, David K.; Chen, Wensheng; Rank, David R.

PATENT ASSIGNEE(S): Molecular Dynamics, Inc., USA

SOURCE: PCT Int. Appl., 634 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 89

PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------------------------|--|----------|-----------------|------------|
| WO 2001086003 | A2 | 20011115 | WO 2001-XF665 | 20010130 |
| W: | AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM | | | |
| RW: | GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG | | | |
| GB 2360284 | A1 | 20010919 | GB 2000-24263 | 20001004 |
| GB 2360284 | B2 | 20020227 | | |
| GB 2361238 | A1 | 20011017 | GB 2001-15281 | 20001004 |
| GB 2361238 | B2 | 20020306 | | |
| WO 2001086003 | A2 | 20011115 | WO 2001-US665 | 20010130 |
| WO 2001086003 | A3 | 20030522 | | |
| W: | AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM | | | |
| RW: | GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG | | | |
| US 2002102252 | A1 | 20020801 | US 2001-827998 | 20010406 |
| PRIORITY APPLN. INFO.: | | | US 2000-180312P | P 20000204 |
| | | | US 2000-207456P | P 20000526 |

| | | |
|-----------------|---|----------|
| US 2000-608408 | A | 20000630 |
| US 2000-632366 | A | 20000803 |
| US 2000-234687P | P | 20000921 |
| US 2000-236359P | P | 20000927 |
| GB 2000-24263 | A | 20001004 |
| WO 2001-US665 | W | 20010130 |

AB A single exon nucleic acid microarray comprising 12,614 single exon nucleic acid probes for measuring gene expression in a sample derived from human lung cells is described. These unique exons are within longer probe sequences; sequencing confirms the exact chem. structure of each probe. Some amplicons have more than one exon, and some exons are contained in more than one amplicon. Expression, homol., and functional information are provided for the genome-derived single exon probes that are expressed significantly in human lung. Also described are 12,386 single exon nucleic acid probes and 12,011 proteins expressed in the lung and their use in methods for detecting gene expression. The genome-derived single exon nucleic acids comprise a novel type of nucleic acid microarray for verifying gene expression. In addn., methods are provided for identifying exons in a eukaryotic genome, and for assigning exons to a single gene. [This abstr. record is one of nine records for this document necessitated by the large no. of index entries required to fully index the document and publication system constraints.].

IT 388091-67-6 388091-68-7 388091-69-8
 388091-71-2 388091-72-3 388091-73-4
 388091-74-5 388091-76-7 388091-77-8
 388091-78-9 388091-79-0 388091-80-3
 388091-82-5 388091-83-6 388091-84-7
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 400618-78-2 400618-79-3 400618-80-6
 400618-81-7

RL: BSU (Biological study, unclassified); PRP (Properties); BIOL
 (Biological study)

(amino acid sequence; human genome-derived single exon nucleic acid
 probes useful for anal. of gene expression in human lung)

IT 400618-82-8 400618-83-9 400618-84-0
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RL: BSU (Biological study, unclassified); PRP (Properties); BIOL
 (Biological study)

(amino acid sequence; human genome-derived single exon nucleic acid

probes useful for anal. of gene expression in human lung)

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RL: BSU (Biological study, unclassified); PRP (Properties); BIOL
 (Biological study)

(amino acid sequence; human genome-derived single exon nucleic acid
 probes useful for anal. of gene expression in human lung)

L12 ANSWER 6 OF 20 HCAPLUS COPYRIGHT 2003 ACS on STN

ACCESSION NUMBER: 2002:348598 HCAPLUS

DOCUMENT NUMBER: 137:28981

TITLE: Human genome derived single exon nucleic acid probes
 useful for gene expression analysis

INVENTOR(S): Penn, Sharron Gaynor; Rank, David Russell; Chen,
 Wensheng; Hanzel, David Kagen

PATENT ASSIGNEE(S): USA

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 Ser. No. 774,203.

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 PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|--|------|----------|-----------------|----------|
| US 2002048763 | A1 | 20020425 | US 2001-864761 | 20010523 |
| GB 2360284 | A1 | 20010919 | GB 2000-24263 | 20001004 |
| GB 2360284 | B2 | 20020227 | | |
| GB 2361238 | A1 | 20011017 | GB 2001-15281 | 20001004 |
| GB 2361238 | B2 | 20020306 | | |
| US 2002081590 | A1 | 20020627 | US 2001-774203 | 20010129 |
| WO 2001057270 | A2 | 20010809 | WO 2001-US661 | 20010130 |
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WO 2001057275 A2 20010809 WO 2001-US667 20010130

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WO 2001057276 A2 20010809 WO 2001-US668 20010130

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WO 2001057277 A2 20010809 WO 2001-US669 20010130

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WO 2001057278 A2 20010809 WO 2001-US670 20010130

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WO 2001086003 A2 20011115 WO 2001-US665 20010130

WO 2001086003 A3 20030522

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US 2002102252 A1 20020801 US 2001-827998 20010406

PRIORITY APPLN. INFO.:

US 2000-180312P P 20000204

US 2000-207456P P 20000526

| | |
|-----------------|-------------|
| US 2000-608408 | A2 20000630 |
| US 2000-632366 | A2 20000803 |
| US 2000-234687P | P 20000921 |
| US 2000-236359P | P 20000927 |
| GB 2000-24263 | A 20001004 |
| US 2001-774203 | A2 20010129 |
| WO 2001-US661 | A2 20010130 |
| WO 2001-US662 | A2 20010130 |
| WO 2001-US663 | A2 20010130 |
| WO 2001-US664 | A2 20010130 |
| WO 2001-US665 | A2 20010130 |
| WO 2001-US666 | A2 20010130 |
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| WO 2001-US668 | A2 20010130 |
| WO 2001-US669 | A2 20010130 |
| WO 2001-US670 | A2 20010130 |
| US 2001-266860P | P 20010205 |

AB Methods and app. for predicting, confirming and displaying functional regions from genomic sequence data are used to identify 16,834 unique human genome-derived single exon probes useful for gene expression anal., particularly gene expression anal. by microarray. Also presented are genome-derived single exon microarrays that include such probes, peptides encoded by the exons, and antibodies thereto. The human genome-derived single-exon probes are known to be expressed in one or more human tissues or cell types, particularly human brain, heart, liver, fetal liver, placenta, lung, **bone** marrow, BT474 and other human mammary epithelial cells, HeLa and other human cervical epithelial cells, and HBL 100 and other human mammary epithelial cells. The invention provides a method of financing, selling and/or licensing genome-derived single-exon microarrays to customer desiring to measure gene expression, comprising: making available for computerized query or subscription service a database having a record corresponding to each genome-derived single exon microarray available for sale and/or license. [This abstr. record is one of ten records for this document necessitated by the large no. of index entries required to fully index the document and publication system constraints.].

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RL: BSU (Biological study, unclassified); PRP (Properties); BIOL
 (Biological study)

(amino acid sequence; human genome derived single exon nucleic acid
 probes useful for gene expression anal.)

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RL: BSU (Biological study, unclassified); PRP (Properties); BIOL
 (Biological study)

(amino acid sequence; human genome derived single exon nucleic acid
 probes useful for gene expression anal.)

L12 ANSWER 7 OF 20 HCAPLUS COPYRIGHT 2003 ACS on STN

ACCESSION NUMBER: 2002:173785 HCAPLUS
 DOCUMENT NUMBER: 136:351355
 TITLE: Human genome-derived single exon nucleic acid probes
 useful for analysis of gene expression in human adult
 liver
 INVENTOR(S): Penn, Sharron G.; Hanzel, David K.; Chen, Wensheng;
 Rank, David R.
 PATENT ASSIGNEE(S): Molecular Dynamics, Inc., USA
 SOURCE: PCT Int. Appl., 658 pp.
 CODEN: PIXXD2
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 89
 PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---------------|--|----------|-----------------|----------|
| WO 2001057273 | A2 | 20010809 | WO 2001-XF664 | 20010130 |
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| RW: | GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, | | | |

BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG
 GB 2360284 A1 20010919 GB 2000-24263 20001004
 GB 2360284 B2 20020227
 GB 2361238 A1 20011017 GB 2001-15281 20001004
 GB 2361238 B2 20020306
 WO 2001057273 A2 20010809 WO 2001-US664 20010130
 WO 2001057273 A3 20030626

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US 2002102252 A1 20020801 US 2001-827998 20010406
 PRIORITY APPLN. INFO.: US 2000-180312P P 20000204
 US 2000-207456P P 20000526
 US 2000-608408 A 20000630
 US 2000-632366 A 20000803
 US 2000-234687P P 20000921
 US 2000-236359P P 20000927
 GB 2000-24263 A 20001004
 WO 2001-US664 A 20010130

AB A single exon nucleic acid microarray comprising 13,109 single exon
 nucleic acid probes for measuring gene expression in a sample derived from
 human adult liver is described. These unique exons are within longer
 probe sequences; sequencing confirms the exact chem. structure of each
 probe. Some amplicons have more than one exon, and some exons are
 contained in more than one amplicon. Expression, homol., and functional
 information are provided for the genome-derived single exon probes that
 are expressed significantly in human adult liver cells. Also described
 are 12,886 single exon nucleic acid probes and 12,583 proteins expressed
 in the adult liver and their use in methods for detecting gene expression.
 The genome-derived single exon nucleic acids comprise a novel type of
 nucleic acid microarray for verifying gene expression. In addn., methods
 are provided for identifying exons in a eukaryotic genome, and for
 assigning exons to a single gene.

IT 388091-67-6 388091-68-7 388091-69-8
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RL: ANT (Analyte); BSU (Biological study, unclassified); BUU (Biological use, unclassified); PRP (Properties); ANST (Analytical study); BIOL (Biological study); USES (Uses)

(amino acid sequence; human genome-derived single exon nucleic acid probes useful for anal. of gene expression in human adult liver)

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RL: ANT (Analyte); BSU (Biological study, unclassified); BUU (Biological use, unclassified); PRP (Properties); ANST (Analytical study); BIOL (Biological study); USES (Uses)

(amino acid sequence; human genome-derived single exon nucleic acid probes useful for anal. of gene expression in human adult liver)

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RL: ANT (Analyte); BSU (Biological study, unclassified); BUU (Biological use, unclassified); PRP (Properties); ANST (Analytical study); BIOL (Biological study); USES (Uses)

(amino acid sequence; human genome-derived single exon nucleic acid probes useful for anal. of gene expression in human adult liver)

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RL: ANT (Analyte); BSU (Biological study, unclassified); BUU (Biological use, unclassified); PRP (Properties); ANST (Analytical study); BIOL (Biological study); USES (Uses)
 (amino acid sequence; human genome-derived single exon nucleic acid probes useful for anal. of gene expression in human adult liver)

L12 ANSWER 8 OF 20 HCAPLUS COPYRIGHT 2003 ACS on STN

ACCESSION NUMBER: 2002:142851 HCAPLUS

DOCUMENT NUMBER: 136:215388

TITLE: Immunogenic hepatitis B nucleocapsid protein (HBc) chimeric particles having enhanced stability

INVENTOR(S): Birkett, Ashley J.

PATENT ASSIGNEE(S): Apovia, Inc., USA

SOURCE: PCT Int. Appl., 290 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 2

PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------------------------|--|----------|-------------------|----------|
| WO 2002014478 | A2 | 20020221 | WO 2001-US41759 | 20010816 |
| WO 2002014478 | A3 | 20030605 | | |
| W: | AE, AG, AL, AU, BA, BB, BG, BR, BZ, CA, CN, CO, CR, CU, CZ, DM, DZ, EE, GD, GE, HR, HU, ID, IL, IN, IS, JP, KP, KR, LC, LK, LR, LT, LV, MA, MG, MK, MN, MX, MZ, NO, NZ, PL, RO, SG, SI, SK, TT, UA, UZ, VN, YU, ZA, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM | | | |
| RW: | GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG | | | |
| US 2003138769 | A1 | 20030724 | US 2001-930915 | 20010815 |
| AU 2001085452 | A5 | 20020225 | AU 2001-85452 | 20010816 |
| PRIORITY APPLN. INFO.: | | | US 2000-225843P P | 20000816 |
| | | | US 2000-226867P P | 20000822 |
| | | | US 2001-930915 A | 20010815 |
| | | | WO 2001-US41759 W | 20010816 |

AB A chimeric, carboxy-terminal truncated hepatitis B virus nucleocapsid protein (core protein or HBc) is disclosed that is engineered for both enhanced stability of self-assembled particles and the display of an immunogenic epitope. The immunogenic epitope is a B cell epitope or T cell epitope derived from pathogen such as Streptococcus pneumonia, Cryptosporidium parvum, HIV, foot and mouth disease virus, influenza virus, Yersinia pestia, etc. The display of the immunogenic epitope is displayed in the immunogenic loop of HBc, whereas the enhanced stability of self-assembled particles is obtained by the presence of at least one heterologous cysteine residue near the carboxy-terminus of the chimera mol. Methods of making and using the chimeras are also disclosed.

IT 112-80-1D, Oleic acid, sorbitan or mannitol esters

RL: BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(chimeric proteins comprising HBcAg and T and/or B cell epitope for use as vaccines)

IT 401460-88-6

RL: PRP (Properties)

(unclaimed sequence; immunogenic hepatitis B nucleocapsid protein (HBc) chimeric particles having enhanced stability)

L12 ANSWER 9 OF 20 HCAPLUS COPYRIGHT 2003 ACS on STN
 ACCESSION NUMBER: 2002:110620 HCAPLUS
 DOCUMENT NUMBER: 136:195269
 TITLE: Human genome-derived single exon nucleic acid probes
 useful for analysis of gene expression in human
 placenta
 INVENTOR(S): Penn, Sharron G.; Hanzel, David K.; Chen, Wensheng;
 Rank, David R.
 PATENT ASSIGNEE(S): Molecular Dynamics, Inc., USA
 SOURCE: PCT Int. Appl., 654 pp.
 CODEN: PIXXD2
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 89
 PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|--|------|----------|-----------------|------------|
| WO 2001057272 | A2 | 20010809 | WO 2001-XD663 | 20010130 |
| W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG | | | | |
| GB 2360284 | A1 | 20010919 | GB 2000-24263 | 20001004 |
| GB 2360284 | B2 | 20020227 | | |
| GB 2361238 | A1 | 20011017 | GB 2001-15281 | 20001004 |
| GB 2361238 | B2 | 20020306 | | |
| WO 2001057272 | A2 | 20010809 | WO 2001-US663 | 20010130 |
| WO 2001057272 | A3 | 20030103 | | |
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| US 2002102252 | A1 | 20020801 | US 2001-827998 | 20010406 |
| PRIORITY APPLN. INFO.: | | | | |
| | | | US 2000-180312P | P 20000204 |
| | | | US 2000-207456P | P 20000526 |
| | | | US 2000-608408 | A 20000630 |
| | | | US 2000-632366 | A 20000803 |
| | | | US 2000-234687P | P 20000921 |
| | | | US 2000-236359P | P 20000927 |
| | | | GB 2000-24263 | A 20001004 |
| | | | WO 2001-US663 | A 20010130 |

AB A single exon nucleic acid microarray comprising 13,232 single exon nucleic acid probes for measuring gene expression in a sample derived from human placenta cells is described. These unique exons are within longer probe sequences; sequencing confirms the exact chem. structure of each probe. Some amplicons have more than one exon, and some exons are contained in more than one amplicon. Expression, homol., and functional information are provided for the genome-derived single exon probes that are expressed significantly in human placenta. Also described are 13,000 single exon nucleic acid probes and 12,605 proteins expressed in the placenta cells and their use in methods for detecting gene expression. The genome-derived single exon nucleic acids comprise a novel type of

nucleic acid microarray for verifying gene expression. In addn., methods are provided for identifying exons in a eukaryotic genome, and for assigning exons to a single gene. [This abstr. record is one of nine records for this document necessitated by the large no. of index entries required to fully index the document and publication system constraints.].

IT

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RL: ANT (Analyte); BSU (Biological study, unclassified); PRP (Properties);
 ANST (Analytical study); BIOL (Biological study)
 (amino acid sequence; human genome-derived single exon nucleic acid
 probes useful for anal. of gene expression in human placenta)

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RL: ANT (Analyte); BSU (Biological study, unclassified); PRP (Properties);
 ANST (Analytical study); BIOL (Biological study)
 (amino acid sequence; human genome-derived single exon nucleic acid
 probes useful for anal. of gene expression in human placenta)

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RL: ANT (Analyte); BSU (Biological study, unclassified); PRP (Properties);
 ANST (Analytical study); BIOL (Biological study)

(amino acid sequence; human genome-derived single exon nucleic acid probes useful for anal. of gene expression in human placenta)

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RL: ANT (Analyte); BSU (Biological study, unclassified); PRP (Properties);
 ANST (Analytical study); BIOL (Biological study)
 (amino acid sequence; human genome-derived single exon nucleic acid probes useful for anal. of gene expression in human placenta)

L12 ANSWER 10 OF 20 HCAPLUS COPYRIGHT 2003 ACS on STN

ACCESSION NUMBER: 2002:110610 HCAPLUS

DOCUMENT NUMBER: 136:351347

TITLE: Human genome-derived single exon nucleic acid probes useful for analysis of gene expression in human HeLa cells or other human cervical epithelial cells
 INVENTOR(S): Penn, Sharron G.; Hanzel, David K.; Chen, Wensheng; Rank, David R.

PATENT ASSIGNEE(S): Molecular Dynamics, Inc., USA

SOURCE: PCT Int. Appl., 487 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 89

PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---------------|--|----------|-----------------|----------|
| WO 2001057278 | A2 | 20010809 | WO 2001-XB670 | 20010130 |
| W: | AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM | | | |
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| GB 2360284 | A1 | 20010919 | GB 2000-24263 | 20001004 |
| GB 2360284 | B2 | 20020227 | | |
| GB 2361238 | A1 | 20011017 | GB 2001-15281 | 20001004 |
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| US 2002102252 | A1 | 20020801 | US 2001-827998 | 20010406 |

PRIORITY APPLN. INFO.:

US 2000-180312P P 20000204
 US 2000-207456P P 20000526
 US 2000-608408 A 20000630
 US 2000-632366 A 20000803
 US 2000-234687P P 20000921
 US 2000-236359P P 20000927
 GB 2000-24263 A 20001004
 WO 2001-US670 A 20010130

AB A single exon nucleic acid microarray comprising 9290 single exon nucleic acid probes for measuring gene expression in a sample derived from human HeLa cells or other human cervical epithelial cells is described. These unique exons are within longer probe sequences; sequencing confirms the exact chem. structure of each probe. Some amplicons have more than one exon, and some exons are contained in more than one amplicon. Expression, homol., and functional information are provided for the genome-derived single exon probes that are expressed significantly in human HeLa cells or other human cervical epithelial cell lines. Also described are 9102 single exon nucleic acid probes and 8549 proteins expressed in the cervical epithelial cells and their use in methods for detecting gene expression. The genome-derived single exon nucleic acids comprise a novel type of nucleic acid microarray for verifying gene expression. In addn., methods are provided for identifying exons in a eukaryotic genome, and for assigning exons to a single gene. [This abstr. record is one of six records for this document necessitated by the large no. of index entries required to fully index the document and publication system constraints.].

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RL: ANT (Analyte); BUU (Biological use, unclassified); PRP (Properties);
 ANST (Analytical study); BIOL (Biological study); USES (Uses)
 (amino acid sequence; human genome-derived single exon nucleic acid
 probes useful for anal. of gene expression in human HeLa cells or other
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RL: ANT (Analyte); BUU (Biological use, unclassified); PRP (Properties);

ANST (Analytical study); BIOL (Biological study); USES (Uses)
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RL: ANT (Analyte); BUU (Biological use, unclassified); PRP (Properties);
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RL: ANT (Analyte); BUU (Biological use, unclassified); PRP (Properties);
 ANST (Analytical study); BIOL (Biological study); USES (Uses)
 (amino acid sequence; human genome-derived single exon nucleic acid
 probes useful for anal. of gene expression in human HeLa cells or other
 human cervical epithelial cells)

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ACCESSION NUMBER: 2002:110604 HCAPLUS

DOCUMENT NUMBER: 136:178933

TITLE: Human genome-derived single exon nucleic acid probes
 useful for analysis of gene expression in human fetal
 liver

INVENTOR(S): Penn, Sharron G.; Hanzel, David K.; Chen, Wensheng;
 Rank, David R.

PATENT ASSIGNEE(S): Molecular Dynamics, Inc., USA

SOURCE: PCT Int. Appl., 639 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

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| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---------------|--|----------|-----------------|----------|
| WO 2001057277 | A2 | 20010809 | WO 2001-XD669 | 20010130 |
| W: | AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM | | | |
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| GB 2360284 | A1 | 20010919 | GB 2000-24263 | 20001004 |
| GB 2360284 | B2 | 20020227 | | |
| GB 2361238 | A1 | 20011017 | GB 2001-15281 | 20001004 |
| GB 2361238 | B2 | 20020306 | | |
| WO 2001057277 | A2 | 20010809 | WO 2001-US669 | 20010130 |
| WO 2001057277 | A3 | 20030213 | | |
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US 2002102252 A1 20020801 US 2001-827998 20010406
PRIORITY APPLN. INFO.: US 2000-180312P P 20000204
US 2000-207456P P 20000526
US 2000-608408 A 20000630
US 2000-632366 A 20000803
US 2000-234687P P 20000921
US 2000-236359P P 20000927
GB 2000-24263 A 20001004
WO 2001-US669 A 20010130

AB A single exon nucleic acid microarray comprising 12,673 single exon nucleic acid probes for measuring gene expression in a sample derived from human fetal liver cells is described. These unique exons are within longer probe sequences; sequencing confirms the exact chem. structure of each probe. Some amplicons have more than one exon, and some exons are contained in more than one amplicon. Expression, homol., and functional information are provided for the genome-derived single exon probes that are expressed significantly in human fetal liver cells. Also described are 12,456 single exon nucleic acid probes and 12,027 proteins expressed in the fetal liver and their use in methods for detecting gene expression. The genome-derived single exon nucleic acids comprise a novel type of nucleic acid microarray for verifying gene expression. In addn., methods are provided for identifying exons in a eukaryotic genome, and for assigning exons to a single gene. [This abstr. record is one of nine records for this document necessitated by the large no. of index entries required to fully index the document and publication system constraints.].

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RL: ANT (Analyte); BSU (Biological study, unclassified); PRP (Properties);
 ANST (Analytical study); BIOL (Biological study)
 (amino acid sequence; human genome-derived single exon nucleic acid
 probes useful for anal. of gene expression in human fetal liver)

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RL: ANT (Analyte); BSU (Biological study, unclassified); PRP (Properties);
 ANST (Analytical study); BIOL (Biological study)

(amino acid sequence; human genome-derived single exon nucleic acid
 probes useful for anal. of gene expression in human fetal liver)

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RL: ANT (Analyte); BSU (Biological study, unclassified); PRP (Properties);
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 probes useful for anal. of gene expression in human fetal liver)

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RL: ANT (Analyte); BSU (Biological study, unclassified); PRP (Properties);
 ANST (Analytical study); BIOL (Biological study)
 (amino acid sequence; human genome-derived single exon nucleic acid
 probes useful for anal. of gene expression in human fetal liver)

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ACCESSION NUMBER: 2002:110588 HCAPLUS

DOCUMENT NUMBER: 136:305084

TITLE: Human genome-derived single exon nucleic acid probes
 useful for analysis of gene expression in human brain

INVENTOR(S): Penn, Sharron G.; Hanzel, David K.; Chen, Wensheng;
 Rank, David R.

PATENT ASSIGNEE(S): Molecular Dynamics, Inc., USA

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| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|--|--|----------|-----------------|------------|
| WO 2001057275 | A2 | 20010809 | WO 2001-XD667 | 20010130 |
| <p>W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM</p> <p>RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG</p> | | | | |
| GB 2360284 | A1 | 20010919 | GB 2000-24263 | 20001004 |
| GB 2360284 | B2 | 20020227 | | |
| GB 2361238 | A1 | 20011017 | GB 2001-15281 | 20001004 |
| GB 2361238 | B2 | 20020306 | | |
| WO 2001057275 | A2 | 20010809 | WO 2001-US667 | 20010130 |
| WO 2001057275 | C2 | 20021017 | | |
| WO 2001057275 | A3 | 20030417 | | |
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| US 2002102252 | A1 | 20020801 | US 2001-827998 | 20010406 |
| PRIORITY APPLN. INFO.: | | | | |
| | | | US 2000-180312P | P 20000204 |
| | | | US 2000-207456P | P 20000526 |
| | | | US 2000-608408 | A 20000630 |
| | | | US 2000-632366 | A 20000803 |
| | | | US 2000-234687P | P 20000921 |
| | | | US 2000-236359P | P 20000927 |
| | | | GB 2000-24263 | A 20001004 |
| | | | WO 2001-US667 | A 20010130 |
| AB | <p>A single exon nucleic acid microarray comprising 12,821 single exon nucleic acid probes for measuring gene expression in a sample derived from human brain cells is described. These unique exons are within longer probe sequences; sequencing confirms the exact chem. structure of each probe. Some amplicons have more than one exon, and some exons are contained in more than one amplicon. Expression, homol., and functional information are provided for the genome-derived single exon probes that are expressed significantly in human brain. Also described are 12,613 single exon nucleic acid probes and 12,377 proteins expressed in the brain and their use in methods for detecting gene expression. The genome-derived single exon nucleic acids comprise a novel type of nucleic acid microarray for verifying gene expression. In addn., methods are provided for identifying exons in a eukaryotic genome, and for assigning exons to a single gene. [This abstr. record is one of nine records for this document necessitated by the large no. of index entries required to fully index the document and publication system constraints.]</p> | | | |
| IT | <p>388091-67-6 388091-68-7 388091-69-8 388091-71-2 388091-72-3 388091-73-4 388091-74-5 388091-76-7 388091-77-8 388091-78-9 388091-79-0 388091-80-3</p> | | | |

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RL: ANT (Analyte); BSU (Biological study, unclassified); PRP (Properties);
 ANST (Analytical study); BIOL (Biological study)

(amino acid sequence; human genome-derived single exon nucleic acid
 probes useful for anal. of gene expression in human brain)

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RL: ANT (Analyte); BSU (Biological study, unclassified); PRP (Properties);
 ANST (Analytical study); BIOL (Biological study)
 (amino acid sequence; human genome-derived single exon nucleic acid
 probes useful for anal. of gene expression in human brain)

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RL: ANT (Analyte); BSU (Biological study, unclassified); PRP (Properties);
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RL: ANT (Analyte); BSU (Biological study, unclassified); PRP (Properties);
 ANST (Analytical study); BIOL (Biological study)
 (amino acid sequence; human genome-derived single exon nucleic acid
 probes useful for anal. of gene expression in human brain)

L12 ANSWER 13 OF 20 HCAPLUS COPYRIGHT 2003 ACS on STN

ACCESSION NUMBER: 2002:110579 HCAPLUS

DOCUMENT NUMBER: 136:211829

TITLE: Human genome-derived single exon nucleic acid probes
 useful for analysis of gene expression in human bone
 marrow

INVENTOR(S): Penn, Sharron G.; Hanzel, David K.; Chen, Wensheng;
 Rank, David R.

PATENT ASSIGNEE(S): Molecular Dynamics, Inc., USA

SOURCE: PCT Int. Appl., 657 pp.

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PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---------------|--|----------|-----------------|----------|
| WO 2001057276 | A2 | 20010809 | WO 2001-XD668 | 20010130 |
| W: | AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM | | | |
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| GB 2360284 | A1 | 20010919 | GB 2000-24263 | 20001004 |
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AB A single exon nucleic acid microarray comprising 13,114 single exon nucleic acid probes for measuring gene expression in a sample derived from human bone marrow is described. These unique exons are within longer probe sequences; sequencing confirms the exact chem. structure of each probe. Some amplicons have more than one exon, and some exons are contained in more than one amplicon. Expression, homol., and functional information are provided for the genome-derived single exon probes that are expressed significantly in human bone marrow. Also described are 12,898 single exon nucleic acid probes and 12,616 proteins expressed in the bone marrow and their use in methods for detecting gene expression. The genome-derived single exon nucleic acids comprise a novel type of nucleic acid microarray for verifying gene expression. In addn., methods are provided for identifying exons in a eukaryotic genome, and for assigning exons to a single gene. [This abstr. record is one of nine records for this document necessitated by the large no. of index entries required to fully index the document and publication system constraints.].

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---------------|--|----------|-----------------|----------|
| WO 2001057274 | A2 | 20010809 | WO 2001-XD666 | 20010130 |
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GB 2360284 A1 20010919 GB 2000-24263 20001004
GB 2360284 B2 20020227
GB 2361238 A1 20011017 GB 2001-15281 20001004
GB 2361238 B2 20020306
WO 2001057274 A2 20010809 WO 2001-US666 20010130
WO 2001057274 A3 20030508

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US 2002102252 A1 20020801 US 2001-827998 20010406

PRIORITY APPLN. INFO.:

US 2000-180312P P 20000204
US 2000-207456P P 20000526
US 2000-608408 A 20000630
US 2000-632366 A 20000803
US 2000-234687P P 20000921
US 2000-236359P P 20000927
GB 2000-24263 A 20001004
WO 2001-US666 A 20010130

AB A single exon nucleic acid microarray comprising 9980 single exon nucleic acid probes for measuring gene expression in a sample derived from human heart is described. These unique exons are within longer probe sequences; sequencing confirms the exact chem. structure of each probe. Some amplicons have more than one exon, and some exons are contained in more than one amplicon. Expression, homol., and functional information are provided for the genome-derived single exon probes that are expressed significantly in human heart cells. Also described are 9791 single exon nucleic acid probes and 9347 proteins expressed in the heart and their use in methods for detecting gene expression. The genome-derived single exon nucleic acids comprise a novel type of nucleic acid microarray for verifying gene expression. In addn., methods are provided for identifying exons in a eukaryotic genome, and for assigning exons to a single gene. [This abstr. record is one of six records for this document necessitated by the large no. of index entries required to fully index the document and publication system constraints.].

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RL: ANT (Analyte); BSU (Biological study, unclassified); BUU (Biological
 use, unclassified); PRP (Properties); ANST (Analytical study); BIOL
 (Biological study); USES (Uses)
 (amino acid sequence; human genome-derived single exon nucleic acid
 probes useful for anal. of gene expression in human heart)

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RL: ANT (Analyte); BSU (Biological study, unclassified); BUU (Biological use, unclassified); PRP (Properties); ANST (Analytical study); BIOL (Biological study); USES (Uses)

(amino acid sequence; human genome-derived single exon nucleic acid probes useful for anal. of gene expression in human heart)

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RL: ANT (Analyte); BSU (Biological study, unclassified); BUU (Biological use, unclassified); PRP (Properties); ANST (Analytical study); BIOL (Biological study); USES (Uses)

(amino acid sequence; human genome-derived single exon nucleic acid probes useful for anal. of gene expression in human heart)

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RL: ANT (Analyte); BSU (Biological study, unclassified); BUU (Biological
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(amino acid sequence; human genome-derived single exon nucleic acid
 probes useful for anal. of gene expression in human heart)

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(amino acid sequence; human genome-derived single exon nucleic acid probes useful for anal. of gene expression in human heart)

L12 ANSWER 15 OF 20 HCAPLUS COPYRIGHT 2003 ACS on STN

ACCESSION NUMBER: 2001:934560 HCAPLUS
 Correction of: 2001:582102

DOCUMENT NUMBER: 136:195263
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TITLE: Human genome-derived single exon nucleic acid probes useful for analysis of gene expression in human breast and BT 474 cells

INVENTOR(S): Penn, Sharron G.; Hanzel, David K.; Chen, Wensheng; Rank, David R.

PATENT ASSIGNEE(S): Molecular Dynamics, Inc., USA

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DOCUMENT TYPE: Patent

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| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---------------|--|----------|-----------------|----------|
| WO 2001057271 | A2 | 20010809 | WO 2001-US662 | 20010130 |
| WO 2001057271 | A3 | 20030220 | | |
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| GB 2360284 | A1 | 20010919 | GB 2000-24263 | 20001004 |
| GB 2360284 | B2 | 20020227 | | |
| GB 2361238 | A1 | 20011017 | GB 2001-15281 | 20001004 |
| GB 2361238 | B2 | 20020306 | | |
| WO 2001057271 | A2 | 20010809 | WO 2001-XA662 | 20010130 |
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GB 2378754 A1 20030219 GB 2002-17805 20010130

EP 1309724 A2 20030514 EP 2001-903003 20010130

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AU 2001063432 A5 20011211 AU 2001-63432 20010523

US 2002048763 A1 20020425 US 2001-864761 20010523

US 2002048763 A1 20020425 US 2001-864761 20010523

US 2002048763 A1 20020425 US 2001-864761 20010523

US 2002048763 A1 20020425 US 2001-864761 20010523

US 2002048763 A1 20020425 US 2001-864761 20010523

US 2002048763 A1 20020425 US 2001-864761 20010523

US 2002048763 A1 20020425 US 2001-864761 20010523

US 2002048763 A1 20020425 US 2001-864761 20010523

US 2002048763 A1 20020425 US 2001-864761 20010523

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US 2002048800 A1 20020425 US 2001-866108 20010525

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US 2002048800 A1 20020425 US 2001-866108 20010525

US 2002048800 A1 20020425 US 2001-866108 20010525

GB 2380197 A1 20030402 GB 2002-27802 20010525

US 2002169295 A1 20021114 US 2001-872462 20010601

WO 2002024750 A2 20020328 WO 2001-US29656 20010921

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 US 2000-207456P P 20000526
 US 2000-608408 A 20000630
 US 2000-632366 A 20000803
 US 2000-234687P P 20000921
 US 2000-236359P P 20000927
 GB 2000-24263 A 20001004
 US 2001-774203 A2 20010129
 WO 2001-US661 A 20010130
 WO 2001-US662 W 20010130
 WO 2001-US663 A 20010130
 WO 2001-US664 A 20010130
 WO 2001-US665 A 20010130
 WO 2001-US666 A 20010130
 WO 2001-US667 A 20010130
 WO 2001-US668 A 20010130
 WO 2001-US669 A 20010130
 WO 2001-US670 A 20010130
 US 2001-266860P P 20010205
 US 2001-864761 A2 20010523
 WO 2001-US16981 W 20010525
 US 2001-872462 A 20010601
 US 2001-315676P P 20010828
 WO 2001-US29656 W 20010921
 WO 2001-US30287 W 20010926
 US 2001-326105P P 20010928
 US 2001-327898P P 20011009
 US 2001-335941P P 20011024

AB A single exon nucleic acid microarray comprising 5205 single exon nucleic acid probes for measuring gene expression in a sample derived from human BT 474 cells is described. These unique exons are within longer probe sequences; sequencing confirms the exact chem. structure of each probe. Some amplicons have more than one exon, and some exons are contained in more than one amplicon. Expression, homol., and functional information are provided for the genome-derived single exon probes that are expressed significantly in human BT 474 cells. Also described are 5112 single exon nucleic acid probes and 5121 proteins expressed in the BT 474 cells and their use in methods for detecting gene expression. The genome-derived single exon nucleic acids comprise a novel type of nucleic acid microarray for verifying gene expression. In addn., methods are provided for identifying exons in a eukaryotic genome, and for assigning exons to a single gene. [This abstr. record is one of three records for this document necessitated by the large no. of index entries required to fully index the document and publication system constraints.]

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RL: BSU (Biological study, unclassified); PRP (Properties); BIOL
 (Biological study)

(amino acid sequence; human genome-derived single exon nucleic acid
 probes useful for anal. of gene expression in human breast and BT 474
 cells)

IT 400618-87-3 400618-88-4 400618-90-8
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RL: BSU (Biological study, unclassified); PRP (Properties); BIOL
 (Biological study)

(amino acid sequence; human genome-derived single exon nucleic acid
 probes useful for anal. of gene expression in human breast and BT 474
 cells)

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RL: BSU (Biological study, unclassified); PRP (Properties); BIOL
 (Biological study)

(amino acid sequence; human genome-derived single exon nucleic acid
 probes useful for anal. of gene expression in human breast and BT 474

cells)
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RL: BSU (Biological study, unclassified); PRP (Properties); BIOL
 (Biological study)

(amino acid sequence; human genome-derived single exon nucleic acid
 probes useful for anal. of gene expression in human breast and BT 474
 cells)

IT 400634-06-2 400634-07-3 400634-11-9
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RL: BSU (Biological study, unclassified); PRP (Properties); BIOL
 (Biological study)

(amino acid sequence; human genome-derived single exon nucleic acid
 probes useful for anal. of gene expression in human breast and BT 474
 cells)

L12 ANSWER 16 OF 20 HCAPLUS COPYRIGHT 2003 ACS on STN

ACCESSION NUMBER: 2001:512017 HCAPLUS

DOCUMENT NUMBER: 136:211522

TITLE: Polymorphism identification within 50 equine
 gene-specific sequence tagged sites

AUTHOR(S): Shubitowski, D. M.; Venta, P. J.; Douglass, C. L.;
 Zhou, R.-X.; Ewart, S. L.

CORPORATE SOURCE: Department of Large Animal Clinical Sciences, Michigan
 State University, East Lansing, MI, 48824, USA

SOURCE: Animal Genetics (2001), 32(2), 78-88
 CODEN: ANGE3; ISSN: 0268-9146

PUBLISHER: Blackwell Science Ltd.

DOCUMENT TYPE: Journal

LANGUAGE: English

AB The continued discovery of polymorphisms in the equine genome will be
 important for future studies using genomic screens and fine mapping for
 the identification of disease genes. Segments of 50 equine genes were
 examd. for variability in 10 different horse breeds using a
 pool-and-sequence method. We identified 11 single nucleotide

polymorphisms (SNPs) in 9380 bp of sequenced exon, and 25 SNPs, six microsatellites, and one insertion/deletion in 16961 bp of sequenced intron. Of all genes studied 52% contained at least one polymorphism, and polymorphisms were found at an overall rate of 1/613 bp. Several of the putative SNPs were tested and verified by restriction enzyme anal. using natural restriction sites or ones created by primer mutagenesis. The lowest allele frequency for a SNP detected in pooled samples was 10%. Three of the SNPs verified in the diverse horse pool were further tested in six breed-specific horse pools and were found to be reasonably variable within breeds. The pool-and-sequence method allows identification of polymorphisms in horse populations and will be a valuable tool for future disease gene and comparative mapping in horses.

IT 402741-21-3 402809-83-0

RL: BSU (Biological study, unclassified); PRP (Properties); BIOL (Biological study)

(amino acid sequence; polymorphism identification within 50 equine gene-specific sequence tagged sites)

REFERENCE COUNT: 26 THERE ARE 26 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L12 ANSWER 17 OF 20 HCAPLUS COPYRIGHT 2003 ACS on STN

ACCESSION NUMBER: 2000:34995 HCAPLUS

DOCUMENT NUMBER: 132:102856

TITLE: Hyaluronic acid mimics for treatment of inflammation and other hyaluronate-associated diseases

INVENTOR(S): Prestwich, Glenn D.; Ziebell, Michael; Luo, Bai; Zhao, Zhan-Gong

PATENT ASSIGNEE(S): USA

SOURCE: PCT Int. Appl., 53 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---------------|--|----------|-----------------|----------|
| WO 2000001841 | A2 | 20000113 | WO 1999-US15263 | 19990706 |
| WO 2000001841 | A3 | 20011108 | | |
| W: | AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, GM, HR, HU, ID, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM | | | |
| RW: | GH, GM, KE, LS, MW, SD, SL, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG | | | |
| CA 2346742 | AA | 20000113 | CA 1999-2346742 | 19990706 |
| AU 9949716 | A1 | 20000124 | AU 1999-49716 | 19990706 |
| EP 1169048 | A2 | 20020109 | EP 1999-933718 | 19990706 |
| R: | AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO | | | |

PRIORITY APPLN. INFO.: US 1998-91758P P 19980706
US 1999-347707 A 19990703
WO 1999-US15263 W 19990706

AB HA mimics and methods related thereto are disclosed. In particular, mimics with structures detd. by virtue of novel methods, and the novel methods are disclosed. The HA mimics are useful for a variety of HA-related uses, including treatment of inflammatory diseases, tumor angiogenesis, skin disease, bone disease, and cardiovascular diseases.

IT 254965-50-9P

RL: BAC (Biological activity or effector, except adverse); BPR (Biological

process); BSU (Biological study, unclassified); PNU (Preparation, unclassified); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); PROC (Process); USES (Uses)
(hyaluronic acid mimics for treatment of inflammation and other hyaluronate-assocd. diseases)

L12 ANSWER 18 OF 20 HCAPLUS COPYRIGHT 2003 ACS on STN

ACCESSION NUMBER: 1981:103813 HCAPLUS
DOCUMENT NUMBER: 94:103813
TITLE: Photoreactive insulin derivatives: preparation and characterization
AUTHOR(S): Thamm, P.; Saunders, D.; Brandenburg, D.
CORPORATE SOURCE: Deutsches Wollforschungsinst., Aachen, D-5100, Fed. Rep. Ger.
SOURCE: Insulin: Chem., Struct. Funct. Insulin Relat. Horm., Proc. Int. Insulin Symp., 2nd (1980), Meeting Date 1979, 309-16. Editor(s): Brandenburg, Dietrich; Wollmer, Axel. de Gruyter: Berlin, Fed. Rep. Ger. CODEN: 44BTA8
DOCUMENT TYPE: Conference
LANGUAGE: English
AB 1A-(R-Gly)-insulin (I) [R = 4,2-N3(O2N)C6H3], NB-(R-Gly)-29B-[N6-(R-Gly)-L-lysine]insulin, 2B,2B'bis(R1-L-Val)insulin-29B,29B'adipoyl dimer [R1 = 4,2-N3(O2N)C6H3CH2CO], NB-R1-insulin, 2B-(R1-L-Val)-1B-de-L-phenylalanineinsulin, and 29B-(N6-R1-L-Lys)insulin were prepd. Thus, NA-(Me3CO2C)-insulin was **acylated** by MeSO2CH2CH2O2COR2 (R2 = succinimido) and treated with F3CCO2H to give NB-(MeSO2CH2CH2O2C)-29B-[N6-(MeSO2CH2CH2O2C)-L-lysine]insulin, which underwent consecutive treatment with PhCSN, Edman degrdn., **acylation** by R-Gly-OR2, and deblocking to give I.
IT 76688-33-0P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(prepn. and deblocking of)

L12 ANSWER 19 OF 20 HCAPLUS COPYRIGHT 2003 ACS on STN

ACCESSION NUMBER: 1979:421047 HCAPLUS
DOCUMENT NUMBER: 91:21047
TITLE: Semisynthetic experiments in the C-terminal range of insulin
AUTHOR(S): Gattner, H. G.; Schmitt, E. W.; Naithani, V. K.
CORPORATE SOURCE: Dtsch. Wollforschungsinst., Aachen, Fed. Rep. Ger.
SOURCE: Semisynth. Pept. Proteins, Pap. Int. Meet. Protein Semisynth. (1978), Meeting Date 1977, 181-91. Editor(s): Offord, R. E.; Di Bello, C. Academic: London, Engl. CODEN: 39MMAW
DOCUMENT TYPE: Conference
LANGUAGE: English
AB Insulin hexamethyl ester (I) was cleaved with trypsin to give des-octapeptide-(B23-30) insulin pentamethyl ester, which was cleaved with carboxypeptidase B to give des-nonapeptide-(B22-30) insulin pentamethyl ester. Des-pentapeptide-(B26-30) insulin pentamethyl ester and des-alanine-(B30) insulin pentamethyl ester were also prepd. In the sapon. of I, asparaginimide formed at position A21; thus, difficulties may arise during sapon. steps in the semisynthesis of insulins. Porcine insulin was cleaved by pepsin to give des-pentapeptide-(B26-30) insulin, which was N-**acylated** with BOC-N3 (BOC = Me3CO2C) to give the NA,NB-di-BOC deriv. The latter was coupled with H-Tyr(CMe3)-Thr(CMe3)-Pro-Lys(BOC)-Thr(CMe3)-OCMe3 by dicyclohexylcarbodiimide/hydroxybenzotriazole to give the protected insulin, which was deblocked with CF3CO2H to give semisynthetic human insulin (porcine and human insulin differ only in residue B30).

IT 69913-74-2P
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT
 (Reactant or reagent)
 (prepn. and selective hydrolysis of)

IT 69913-73-1P
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT
 (Reactant or reagent)
 (prepn. and selective hydrolysis of, with chymotrypsin)

IT 69913-72-0P
 RL: SPN (Synthetic preparation); PREP (Preparation)
 (prepn. of)

L12 ANSWER 20 OF 20 HCAPLUS COPYRIGHT 2003 ACS on STN
 ACCESSION NUMBER: 1978:191425 HCAPLUS
 DOCUMENT NUMBER: 88:191425
 TITLE: Preparation and application of N.alpha.-B1,N.epsilon.-
 B29-bis(tert-butyloxycarbonyl)insulin
 AUTHOR(S): Friesen, Heinz Juergen; Naithani, Vinod K.; Gattner,
 Hans Gregor
 CORPORATE SOURCE: Dtsch. Wollforschungsinstit., Tech. Hochsch. Aachen,
 Aachen, Fed. Rep. Ger.
 SOURCE: Hoppe-Seyler's Zeitschrift fuer Physiologische Chemie
 (1978), 359(1), 103-11
 CODEN: HSZPAZ; ISSN: 0018-4888
 DOCUMENT TYPE: Journal
 LANGUAGE: English

AB The title compd. (I) was prepd. in 80-90% yield by **acylating** the
 .alpha.-N1 and .epsilon.-NB29 amino groups of NAl-trifluoroacetyl-insulin
 with BOCN3 (BOC = Me3CO2C) and cleaving the trifluoroacetyl group from the
 resulting triacylated insulin by NH4HCO3/NH3. I was also prepd. in 65%
 yield from NAl-citraconyl-insulin. The A1 glycine was cleaved from I by
 an Edman degrading and the resulting deriv. was BOC-deblocked with CF3CO2H
 to give des-GlyA1-insulin (II). NAl-Guanidinoacetyl-insulin (III) was
 prepd. from I. The in vitro biol. activities of I, II, and III are given.

IT 66525-60-8P
 RL: BAC (Biological activity or effector, except adverse); BSU (Biological
 study, unclassified); SPN (Synthetic preparation); BIOL (Biological
 study); PREP (Preparation)
 (prepn. and biol. activity of)

IT 66525-59-5P
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT
 (Reactant or reagent)
 (prepn. and reaction with trifluoroacetic acid)

=> select hit rn l12 1-20
 E# OR SYSTEM LIMIT REACHED WHILE PROCESSING ANSWER 14
 E1 THROUGH E999 ASSIGNED

=> fil reg
 FILE 'REGISTRY' ENTERED AT 18:56:12 ON 28 JUL 2003
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STRUCTURE FILE UPDATES: 27 JUL 2003 HIGHEST RN 556005-78-8
 DICTIONARY FILE UPDATES: 27 JUL 2003 HIGHEST RN 556005-78-8

TSCA INFORMATION NOW CURRENT THROUGH JANUARY 6, 2003

Please note that search-term pricing does apply when conducting SmartSELECT searches.

Crossover limits have been increased. See HELP CROSSOVER for details.

Experimental and calculated property data are now available. See HELP PROPERTIES for more information. See STNote 27, Searching Properties in the CAS Registry File, for complete details:
<http://www.cas.org/ONLINE/STN/STNOTES/stnotes27.pdf>

=>
=>

=> d his 114-

(FILE 'HCAPLUS' ENTERED AT 18:42:39 ON 28 JUL 2003)
 SELECT HIT RN L12 1-20

L14 FILE 'REGISTRY' ENTERED AT 18:43:30 ON 28 JUL 2003
 999 S E1-E999

FILE 'HCAPLUS' ENTERED AT 18:47:04 ON 28 JUL 2003
 DEL SELECT
 SELECT HIT RN L12 14-20

L15 FILE 'REGISTRY' ENTERED AT 18:47:32 ON 28 JUL 2003
 999 S E1-E999

FILE 'HCAPLUS' ENTERED AT 18:49:50 ON 28 JUL 2003
 DEL SELECT Y
 SELECT HIT RN L12 15-20

L16 FILE 'REGISTRY' ENTERED AT 18:50:12 ON 28 JUL 2003
 999 S E1-E999

FILE 'HCAPLUS' ENTERED AT 18:53:32 ON 28 JUL 2003
 DEL SELECT Y
 SELECT HIT RN L12 17-20

L17 FILE 'REGISTRY' ENTERED AT 18:53:59 ON 28 JUL 2003
 7 S E1-E7
 L18 11 S (L15 OR L16 OR L17) AND L1

FILE 'HCAPLUS' ENTERED AT 18:54:49 ON 28 JUL 2003

FILE 'REGISTRY' ENTERED AT 18:56:12 ON 28 JUL 2003

=> d .seq 118 1-11

L18 ANSWER 1 OF 11 REGISTRY COPYRIGHT 2003 ACS on STN
 RN 402741-21-3 REGISTRY
 CN L-Valine, glycyl-L-arginyl-L-arginyl-L-.alpha.-aspartyl-L-phenylalanyl-L-
 prolyl-L-.alpha.-glutamyl-L-.alpha.-glutamyl-L-valyl-L-threonyl-L-
 isoleucyl-L-valyl-L-.alpha.-glutamyl-L-.alpha.-glutamyl-L-leucyl-L-arginyl-
 L-arginyl-L-arginyl-L-histidyl-L-alanyl-L-.alpha.-aspartyl- (9CI) (CA
 INDEX NAME)

OTHER NAMES:

CN Glucagon (Equus caballus gene GCG exon 4 fragment plus exon 5)
 SQL 22
 RN 402741-21-3 REGISTRY

SEQ 1 GRRDFPEEVT IVEELRRRHA DV

HITS AT: 11-14

RELATED SEQUENCES AVAILABLE WITH SEQLINK

REFERENCE 1: 138:332694

REFERENCE 2: 136:211522

L18 ANSWER 2 OF 11 REGISTRY COPYRIGHT 2003 ACS on STN

RN 400621-68-3 REGISTRY

CN L-Serine, L-valyl-L-leucyl-L-.alpha.-aspartyl-L-leucyl-L-valyl-L-phenylalanyl-L-seryl-L-.alpha.-glutamylglycylglycyl-L-isoleucyl-L-valyl-L-leucyl-L-seryl-L-phenylalanyl-L-arginyl-L-asparaginy-L-leucyl-L-.alpha.-glutamyl-L-arginyl-L-methionyl-L-valyl-L-leucyl-L-isoleucyl-L-leucyl-L-.alpha.-glutamyl-L-threonyl-L-histidyl-L-valyl- (9CI) (CA INDEX NAME)

OTHER NAMES:

CN 1219: PN: WO0157272 SEQID: 28612 claimed sequence
 CN 1259: PN: WO0157278 SEQID: 20659 claimed
 CN 1763: PN: WO0157275 SEQID: 27737 claimed
 CN 2007: PN: WO0157274 SEQID: 22016 claimed sequence
 CN 2121: PN: WO0157273 SEQID: 28308 claimed
 CN 2276: PN: WO0157276 SEQID: 28320 claimed
 CN 3168: PN: WO0186003 SEQID: 27210 claimed
 CN 543: PN: US20020048763 SEQID: 35544 claimed
 CN Protein (human bone marrow clone WO0152276-SEQID-28320 exon-encoded fragment)
 CN Protein (human brain clone WO0157275-SEQID-27737 exon-encoded fragment)
 CN Protein (human BT474 cell clone WO0157271-SEQID-12620 exon-encoded fragment)
 CN Protein (human cervix cell clone WO0157278-SEQID-20659 exon-encoded fragment)
 CN Protein (human clone US20020048763-SEQID-35544 exon-encoded fragment)
 CN Protein (human clone WO01057273-SEQID-28308 exon-encoded fragment)
 CN Protein (human clone WO0157274-SEQID-22016 exon-encoded fragment)
 CN Protein (human fetal liver clone WO0157277-SEQID-27461 exon-encoded fragment)
 CN Protein (human lung clone WO0186003-SEQID-27210 exon-encoded fragment)
 CN Protein (human placenta clone WO0157272-SEQID-28612 exon-encoded fragment)

SQL 30

RN 400621-68-3 REGISTRY

SEQ 1 VLDLVFSEGG IVLSFRNLER MVLILETHVS

HITS AT: 9-12

RELATED SEQUENCES AVAILABLE WITH SEQLINK

REFERENCE 1: 137:28982

REFERENCE 2: 137:16533

REFERENCE 3: 136:351355

REFERENCE 4: 136:351347

REFERENCE 5: 136:305084

REFERENCE 6: 136:211829

REFERENCE 7: 136:195269

REFERENCE 8: 136:195264

REFERENCE 9: 136:195263

REFERENCE 10: 136:178933

L18 ANSWER 3 OF 11 REGISTRY COPYRIGHT 2003 ACS on STN

RN 400620-15-7 REGISTRY

CN L-Serine, L-.alpha.-aspartyl-L-phenylalanylglycylglycyl-L-histidyl-L-histidyl-L-glutaminy-L-leucylglycyl-L-prolylglycyl-L-leucyl-L-tryptophyl-L-threonyl-L-.alpha.-glutamylglycyl-L-cysteinyl-L-prolylglycyl-L-cysteinyl-L-valyl-L-histidyl-L-glutaminylglycyl-L-tyrosyl-L-glutaminy-L-leucyl-L-prolyl-L-arginyl-L-leucyl-L-.alpha.-aspartyl- (9CI) (CA INDEX NAME)

OTHER NAMES:

CN 1178: PN: WO0157275 SEQID: 27148 claimed
 CN 1447: PN: WO0157274 SEQID: 21456 claimed sequence
 CN 1554: PN: WO0157273 SEQID: 27737 claimed
 CN 1695: PN: WO0157276 SEQID: 27739 claimed
 CN 2684: PN: WO0186003 SEQID: 26721 claimed
 CN 4941: PN: US20020048763 SEQID: 34984 claimed
 CN 600: PN: WO0157272 SEQID: 27993 claimed sequence
 CN 685: PN: WO0157278 SEQID: 20085 claimed
 CN Protein (human bone marrow clone WO0152276-SEQID-27739 exon-encoded fragment)
 CN Protein (human brain clone WO0157275-SEQID-27148 exon-encoded fragment)
 CN Protein (human BT474 cell clone WO0157271-SEQID-12057 exon-encoded fragment)
 CN Protein (human cervix cell clone WO0157278-SEQID-20085 exon-encoded fragment)
 CN Protein (human clone US20020048763-SEQID-34984 exon-encoded fragment)
 CN Protein (human clone WO01057273-SEQID-27737 exon-encoded fragment)
 CN Protein (human clone WO0157274-SEQID-21456 exon-encoded fragment)
 CN Protein (human fetal liver clone WO0157277-SEQID-26885 exon-encoded fragment)
 CN Protein (human lung clone WO0186003-SEQID-26721 exon-encoded fragment)
 CN Protein (human placenta clone WO0157272-SEQID-27993 exon-encoded fragment)

SQL 32

RN 400620-15-7 REGISTRY

SEQ 1 DFGGHHQLGP GLWTEGCPGC VHQGYQLPRL DS

=====

HITS AT: 25-28

RELATED SEQUENCES AVAILABLE WITH SEQLINK

REFERENCE 1: 137:28981

REFERENCE 2: 137:16533

REFERENCE 3: 136:351355

REFERENCE 4: 136:351347

REFERENCE 5: 136:305084

REFERENCE 6: 136:211829

REFERENCE 7: 136:195269

REFERENCE 8: 136:195264

REFERENCE 9: 136:195263

REFERENCE 10: 136:178933

L18 ANSWER 4 OF 11 REGISTRY COPYRIGHT 2003 ACS on STN
 RN 400618-23-7 REGISTRY
 CN L-Asparagine, L-isoleucylglycylglycyl-L-isoleucyl-L-valylglycyl-L-methionyl-L-glutamyl-L-leucyl-L-threonyl-L-.alpha.-glutamyl-L-leucyl-L-lysyl-L-threonyl-L-leucyl-L-leucyl-L-cysteinyl-L-valyl-L-alanyl-L-.alpha.-glutamylglycyl- (9CI) (CA INDEX NAME)

OTHER NAMES:
 CN 140: PN: WO0157272 SEQID: 27126 claimed sequence
 CN 1862: PN: WO0186003 SEQID: 25888 claimed
 CN 314: PN: WO0157275 SEQID: 26282 claimed
 CN 4115: PN: US20020048763 SEQID: 34149 claimed
 CN 612: PN: WO0157274 SEQID: 20621 claimed sequence
 CN 716: PN: WO0157273 SEQID: 26887 claimed
 CN 833: PN: WO0157276 SEQID: 26877 claimed
 CN 878: PN: WO0157278 SEQID: 19270 claimed
 CN Protein (human bone marrow clone WO0152276-SEQID-26877 exon-encoded fragment)
 CN Protein (human brain clone WO0157275-SEQID-26282 exon-encoded fragment)
 CN Protein (human BT474 cell clone WO0157271-SEQID-11185 exon-encoded fragment)
 CN Protein (human cervix cell clone WO0157278-SEQID-19270 exon-encoded fragment)
 CN Protein (human clone US20020048763-SEQID-34149 exon-encoded fragment)
 CN Protein (human clone WO01057273-SEQID-26887 exon-encoded fragment)
 CN Protein (human clone WO0157274-SEQID-20621 exon-encoded fragment)
 CN Protein (human fetal liver clone WO0157277-SEQID-26027 exon-encoded fragment)
 CN Protein (human lung clone WO0186003-SEQID-25888 exon-encoded fragment)
 CN Protein (human placenta clone WO0157272-SEQID-27126 exon-encoded fragment)
 SQL 22
 RN 400618-23-7 REGISTRY

SEQ 1 IGGIVGMQLT ELKTLICVAE GN

HITS AT: 2-5

RELATED SEQUENCES AVAILABLE WITH SEQLINK

REFERENCE 1: 137:28981
 REFERENCE 2: 137:16533
 REFERENCE 3: 136:351355
 REFERENCE 4: 136:351347
 REFERENCE 5: 136:305084
 REFERENCE 6: 136:211829
 REFERENCE 7: 136:195269
 REFERENCE 8: 136:195264
 REFERENCE 9: 136:195263
 REFERENCE 10: 136:178933

L18 ANSWER 5 OF 11 REGISTRY COPYRIGHT 2003 ACS on STN
 RN 254965-50-9 REGISTRY
 CN L-Tyrosine, L-methionyl-L-alanyl-L-leucyl-L-glutamyl-L-leucyl-L-prolyl-L-tyrosyl- (9CI) (CA INDEX NAME)

OTHER NAMES:

CN 27: PN: WO0001841 PAGE: 42 claimed sequence
SQL 8
RN 254965-50-9 REGISTRY

SEQ 1 MALQLPYY

=====

HITS AT: 4-7

REFERENCE 1: 132:102856

L18 ANSWER 6 OF 11 REGISTRY COPYRIGHT 2003 ACS on STN

RN 76688-33-0 REGISTRY

CN Insulin (cattle), NA-[N-(4-azido-2-nitrophenyl)glycyl]-NB-[N-(4-azido-2-nitrophenyl)glycyl]-29B-[N6-(trifluoroacetyl)-L-lysine]- (9CI) (CA INDEX NAME)

OTHER CA INDEX NAMES:

CN 3,4,44,45,90,91-Hexathia-8,11,14,17,20,23,26,29,32,35,38,41,48,51,54,57,60,63,66,69,72,75,78,81,84,86-hexacosazabicyclo[72.11.7]dononacontane, cyclic peptide deriv.

CN Insulin (ox), NA-[N-(4-azido-2-nitrophenyl)glycyl]-NB-[N-(4-azido-2-nitrophenyl)glycyl]-29B-[N6-(trifluoroacetyl)-L-lysine]-

NTE multichain
modified (modifications unspecified)

| type | ----- | location | ----- | description |
|--------|--------|----------|---------|------------------|
| bridge | Cys-8 | - | Cys-8' | disulfide bridge |
| bridge | Cys-20 | - | Cys-21' | disulfide bridge |
| bridge | Cys-7' | - | Cys-12' | disulfide bridge |

SQL 53,31,22

RN 76688-33-0 REGISTRY

SEQ 1 GGIVEQCCAS VCSLYQLENY CN

=====

HITS AT: 1-4

REFERENCE 1: 94:103813

L18 ANSWER 7 OF 11 REGISTRY COPYRIGHT 2003 ACS on STN

RN 69913-74-2 REGISTRY

CN (1A-21A), (1B-29B)-Insulin (human), hexamethyl ester (9CI) (CA INDEX NAME)

OTHER CA INDEX NAMES:

CN 3,4,44,45,90,91-Hexathia-8,11,14,17,20,23,26,29,32,35,38,41,48,51,54,57,60,63,66,69,72,75,78,81,84,86-hexacosazabicyclo[72.11.7]dononacontane, cyclic peptide deriv.

CN Insulin (ox), 8A-L-threonine-10A-L-isoleucine-30B-de-L-alanine-, hexamethyl ester

NTE multichain
modified (modifications unspecified)

| type | ----- | location | ----- | description |
|--------|--------|----------|---------|------------------|
| bridge | Cys-7 | - | Cys-7' | disulfide bridge |
| bridge | Cys-19 | - | Cys-20' | disulfide bridge |
| bridge | Cys-6' | - | Cys-11' | disulfide bridge |

SQL 50,29,21

RN 69913-74-2 REGISTRY

SEQ 1 GIVEECCTSI CSLYQLENYC N

=====

HITS AT: 2-5

REFERENCE 1: 91:21047

L18 ANSWER 8 OF 11 REGISTRY COPYRIGHT 2003 ACS on STN

RN 69913-73-1 REGISTRY

CN (1A-21A), (1B-25B)-Insulin (human), hexamethyl ester (9CI) (CA INDEX NAME)

OTHER CA INDEX NAMES:

CN 3,4,44,45,90,91-Hexathia-8,11,14,17,20,23,26,29,32,35,38,41,48,51,54,57,60,63,66,69,72,75,78,81,84,86-hexacosazabicyclo[72.11.7]dononacontane, cyclic peptide deriv.

CN Insulin (ox), 8A-L-threonine-10A-L-isoleucine-26B-de-L-tyrosine-27B-de-L-threonine-28B-de-L-proline-29B-de-L-lysine-30B-de-L-alanine-, hexamethyl ester

NTE multichain

modified (modifications unspecified)

| type | location | description |
|--------|------------------|------------------|
| bridge | Cys-7 - Cys-7' | disulfide bridge |
| bridge | Cys-19 - Cys-20' | disulfide bridge |
| bridge | Cys-6' - Cys-11' | disulfide bridge |

SQL 46,25,21

RN 69913-73-1 REGISTRY

SEQ 1 GIVEECCTSI CSLYQLENYC N

=====

HITS AT: 2-5

RELATED SEQUENCES AVAILABLE WITH SEQLINK

REFERENCE 1: 91:21047

L18 ANSWER 9 OF 11 REGISTRY COPYRIGHT 2003 ACS on STN

RN 69913-72-0 REGISTRY

CN (1A-21A), (1B-25B)-Insulin (human), 4A,13B,17A,21A,21B-pentamethyl ester (9CI) (CA INDEX NAME)

OTHER CA INDEX NAMES:

CN 3,4,44,45,90,91-Hexathia-8,11,14,17,20,23,26,29,32,35,38,41,48,51,54,57,60,63,66,69,72,75,78,81,84,86-hexacosazabicyclo[72.11.7]dononacontane, cyclic peptide deriv.

CN Insulin (ox), 8A-L-threonine-10A-L-isoleucine-26B-de-L-tyrosine-27B-de-L-threonine-28B-de-L-proline-29B-de-L-lysine-30B-de-L-alanine-, 4A,13B,17A,21A,21B-pentamethyl ester

NTE multichain

modified (modifications unspecified)

| type | location | description |
|--------|------------------|------------------|
| bridge | Cys-7 - Cys-7' | disulfide bridge |
| bridge | Cys-19 - Cys-20' | disulfide bridge |
| bridge | Cys-6' - Cys-11' | disulfide bridge |

SQL 46,25,21

RN 69913-72-0 REGISTRY

SEQ 1 GIVEECCTSI CSLYQLENYC N

=====

HITS AT: 2-5

RELATED SEQUENCES AVAILABLE WITH SEQLINK

REFERENCE 1: 91:21047

L18 ANSWER 10 OF 11 REGISTRY COPYRIGHT 2003 ACS on STN
 RN 66525-60-8 REGISTRY
 CN Insulin (cattle), NA-[N-(aminoiminomethyl)glycyl]- (9CI) (CA INDEX NAME)
 OTHER CA INDEX NAMES:
 CN 3,4,44,45,90,91-Hexathia-8,11,14,17,20,23,26,29,32,35,38,41,48,51,54,57,60
 ,63,66,69,72,75,78,81,84,86-hexacosazabicyclo[72.11.7]dononacontane,
 cyclic peptide deriv.
 CN Insulin (ox), NA-[N-(aminoiminomethyl)glycyl]-
 NTE multichain
 modified (modifications unspecified)

| type | ----- location ----- | description |
|--------|----------------------|------------------|
| bridge | Cys-7 - Cys-8' | disulfide bridge |
| bridge | Cys-19 - Cys-21' | disulfide bridge |
| bridge | Cys-7' - Cys-12' | disulfide bridge |

SQL 52,30,22
 RN 66525-60-8 REGISTRY

SEQ 1 GGIVEQCCAS VCSLYQLENY CN

HITS AT: 1-4

RELATED SEQUENCES AVAILABLE WITH SEQLINK

REFERENCE 1: 88:191425

L18 ANSWER 11 OF 11 REGISTRY COPYRIGHT 2003 ACS on STN
 RN 66525-59-5 REGISTRY
 CN Insulin (cattle), NA-[N-(aminoiminomethyl)glycyl]-NB-[(1,1-
 dimethylethoxy)carbonyl]-29B-[N6-[(1,1-dimethylethoxy)carbonyl]-L-lysine]-
 (9CI) (CA INDEX NAME)
 OTHER CA INDEX NAMES:
 CN 3,4,44,45,90,91-Hexathia-8,11,14,17,20,23,26,29,32,35,38,41,48,51,54,57,60
 ,63,66,69,72,75,78,81,84,86-hexacosazabicyclo[72.11.7]dononacontane,
 cyclic peptide deriv.
 CN Insulin (ox), NA-[N-(aminoiminomethyl)glycyl]-NB-[(1,1-
 dimethylethoxy)carbonyl]-29B-[N6-[(1,1-dimethylethoxy)carbonyl]-L-lysine]-
 NTE multichain
 modified (modifications unspecified)

| type | ----- location ----- | description |
|--------|----------------------|------------------|
| bridge | Cys-7 - Cys-8' | disulfide bridge |
| bridge | Cys-19 - Cys-21' | disulfide bridge |
| bridge | Cys-7' - Cys-12' | disulfide bridge |

SQL 52,30,22
 RN 66525-59-5 REGISTRY

SEQ 1 GGIVEQCCAS VCSLYQLENY CN

HITS AT: 1-4

Russel 10_032330

RELATED SEQUENCES AVAILABLE WITH SEQLINK

REFERENCE 1: 88:191425

=>

=>

=> fil hcaplus
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FILE COVERS 1907 - 28 Jul 2003 VOL 139 ISS 5
 FILE LAST UPDATED: 27 Jul 2003 (20030727/ED)

This file contains CAS Registry Numbers for easy and accurate substance identification.

=>
 =>

=> d stat que l13
 L2 13173 SEA FILE=REGISTRY ABB=ON PLU=ON GIVE/SQSP
 L4 50431 SEA FILE=REGISTRY ABB=ON PLU=ON BONE OR FATTY(W)ACID? OR
 ACYLAT?
 L5 10042 SEA FILE=REGISTRY ABB=ON PLU=ON L2 NOT INSULIN?
 L7 686265 SEA FILE=HCAPLUS ABB=ON PLU=ON L4 OR BONE OR FATTY(W)ACID?
 OR ACYLAT? OR OSTEOPOROS?
 L9 252 SEA FILE=REGISTRY ABB=ON PLU=ON L5 AND SQL<=25
 L11 142 SEA FILE=HCAPLUS ABB=ON PLU=ON L9
 L13 4 SEA FILE=HCAPLUS ABB=ON PLU=ON L11 AND L7

=>
 =>

=> d ibib abs hitrn l13 1-4

L13 ANSWER 1 OF 4 HCAPLUS COPYRIGHT 2003 ACS on STN
 ACCESSION NUMBER: 2002:850307 HCAPLUS
 DOCUMENT NUMBER: 137:346244
 TITLE: Tissue remodeling with compds. comprising a sequence
 from TGF-.beta. super family Ser/Thr/kinase receptors
 INVENTOR(S): Ben-Sasson, Shmuel
 PATENT ASSIGNEE(S): Children's Medical Center Corporation, USA
 SOURCE: U.S. Pat. Appl. Publ., 51 pp., Cont.-in-part of Appl.
 No. PCT/US00/32852.
 CODEN: USXXCO
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 3
 PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---------------|------|----------|-----------------|----------|
| US 2002165150 | A1 | 20021107 | US 2001-32330 | 20011231 |

WO 2001042280 A2 20010614 WO 2000-US32852 20001204
 WO 2001042280 A3 20020307

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,
 CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR,
 HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT,
 LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU,
 SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN,
 YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
 RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY,
 DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF,
 BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG

PRIORITY APPLN. INFO.: US 1998-161094 B2 19980925
 WO 2000-US32851 W 20001204
 WO 2000-US32852 A2 20001204
 US 1999-458491 A1 19991209

AB The invention concerns a method for the modulation of tissue-remodeling
 processes, by contacting the tissue to be remodeled with a compd.
 comprising a sequence derived from certain regions of TGF-.beta. super
 family Ser/Thr/kinase receptors.

IT 332350-87-5, BMP receptor kinase-2
 RL: BSU (Biological study, unclassified); BIOL (Biological study)
 (tissue remodeling with compds. comprising a sequence from TGF-.beta.
 super family Ser/Thr/kinase receptors)

IT 474526-71-1 474526-72-2 474526-73-3
 474526-74-4 474526-78-8 474526-96-0
 RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL
 (Biological study); USES (Uses)
 (tissue remodeling with compds. comprising a sequence from TGF-.beta.
 super family Ser/Thr/kinase receptors)

L13 ANSWER 2 OF 4 HCAPLUS COPYRIGHT 2003 ACS on STN

ACCESSION NUMBER: 2000:513533 HCAPLUS
 DOCUMENT NUMBER: 133:140232
 TITLE: Monodisperse hexameric **acylated** insulin
 analog formulations
 INVENTOR(S): Ng, Kingman; Li, Shun; Watts, Eric Alan
 PATENT ASSIGNEE(S): Eli Lilly and Company, USA
 SOURCE: PCT Int. Appl., 56 pp.
 CODEN: PIXXD2
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---------------|---|----------|-----------------|----------|
| WO 2000043034 | A2 | 20000727 | WO 2000-US1627 | 20000126 |
| WO 2000043034 | A3 | 20001228 | | |
| W: | AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, EE, ES, FI, GB, GD, GE, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM | | | |
| RW: | GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG | | | |
| EP 1146896 | A2 | 20011024 | EP 2000-904496 | 20000126 |
| EP 1146896 | B1 | 20020724 | | |
| R: | AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO | | | |
| AT 220917 | E | 20020815 | AT 2000-904496 | 20000126 |
| JP 2002535287 | T2 | 20021022 | JP 2000-594487 | 20000126 |

ES 2180511 T3 20030216 ES 2000-904496 20000126
 PRIORITY APPLN. INFO.: US 1999-117291P P 19990126
 WO 2000-US1627 W 20000126

AB The present invention provides formulations and methods for prepg. formulations contg. an aq. soln. at a pH of greater than about 7.9. The aq. soln. includes an isotonicity agent, a phenolic deriv., zinc ions, and an **acylated** human insulin analog. More particularly, the invention relates to formulations having a pH of greater than about 7.9 that include a monoacylated human insulin analog such as an **acylated** des(B30) human insulin analog or an analog that comprises a native or modified human insulin A chain optionally modified at position A21, and a modified native human insulin B chain optionally modified at position B3 and modified at position B28, or at both positions B28 and B29, and that contains a lysine residue at either position B28 or B29 **acylated** with a **fatty acid** residue. The invention also provides a method for treating a patient suffering from hyperglycemia using the pharmaceutical formulations of the invention.

IT 286410-19-3P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); PNU (Preparation, unclassified); RCT (Reactant); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)
 (monodisperse hexameric **acylated** insulin analog formulations)

L13 ANSWER 3 OF 4 HCAPLUS COPYRIGHT 2003 ACS on STN

ACCESSION NUMBER: 2000:10612 HCAPLUS
 DOCUMENT NUMBER: 132:73648
 TITLE: Lipophilic insulin derivatives soluble at physiological pH with prolonged serum half-lives and biological activity
 INVENTOR(S): Havelund, Svend; Halstrom, John; Jonassen, Ib; Andersen, Asser Sloth; Markussen, Jan
 PATENT ASSIGNEE(S): Novo Nordisk A/S, Den.
 SOURCE: U.S., 47 pp., Cont.-in-part of U.S. 5,750,497.
 CODEN: USXXAM
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 3
 PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---------------|------|----------|-----------------|----------|
| US 6011007 | A | 20000104 | US 1997-975365 | 19971120 |
| ZA 9407187 | A | 19950317 | ZA 1994-7187 | 19940916 |
| JP 2000060556 | A2 | 20000229 | JP 1999-221632 | 19940916 |
| EP 1132404 | A2 | 20010912 | EP 2001-112992 | 19940916 |
| EP 1132404 | A3 | 20020327 | | |

R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, PT, IE, SI, LT

| | | | | |
|---------------|----|----------|----------------|----------|
| JP 2002308899 | A2 | 20021023 | JP 2001-385921 | 19940916 |
| US 5750497 | A | 19980512 | US 1995-400256 | 19950308 |
| AU 745983 | B2 | 20020411 | AU 2000-51960 | 20000811 |

PRIORITY APPLN. INFO.: DK 1993-1044 A 19930917
 US 1995-400256 A2 19950308
 US 1994-190829 A 19940202
 EP 1994-926816 A3 19940916
 JP 1995-508923 A3 19940916
 JP 1999-221632 A3 19940916

OTHER SOURCE(S): MARPAT 132:73648

AB Human insulin derivs. with improved soly. at physiol. pH and that retain biol. activity for longer than wild-type human insulin are described. The insulins are substituted at positions A21 and B3 with either being any amino acid except lysine, arginine, or cysteine. The phenylalanine at B1

may be deleted and the amino acid at position B30 may be deleted or substituted by any amino acid except lysine, arginine, or cysteine or by another amino acid that is lipophilic having a C10-24 side chain. If B30 is deleted or substituted, lysineB29 is modified by a carboxylic acid connected to the .epsilon.-amino group. When B30 is threonine or alanine and A21 and B3 are both asparagine, and phenylalanineB1 is present, then the insulin deriv. is always present as a Zn2 complex.

IT 253597-47-6

RL: PRP (Properties)

(unclaimed protein sequence; lipophilic insulin derivs. sol. at physiol. pH with prolonged serum half-lives and biol. activity)

REFERENCE COUNT: 25 THERE ARE 25 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L13 ANSWER 4 OF 4 HCAPLUS COPYRIGHT 2003 ACS on STN

ACCESSION NUMBER: 1991:102773 HCAPLUS

DOCUMENT NUMBER: 114:102773

TITLE: Studies on the total synthesis of an A7,B7-dicarbainsulin III. Assembly of segments and generation of biological activity

AUTHOR(S): Videnov, G.; Buettner, Klaus; Casaretto, M.; Fohles, Josef; Gattner, Hans Gregor; Stoev, S.; Brandenburg, Dietrich

CORPORATE SOURCE: Inst. Mol. Biol., Sofia, 1113, Bulg.

SOURCE: Biological Chemistry Hoppe-Seyler (1990), 371(11), 1057-66

CODEN: BCHSEI; ISSN: 0177-3593

DOCUMENT TYPE: Journal

LANGUAGE: English

AB As a further contribution to the synthesis of an insulin analog with a stable A7-B7 interchain bond, the synthesis of A(8-21) by soln. methods, and of B(9-25) as well as [7-(2,7-diaminosuberic acid)]B(1-8) by solid phase methods is described. In the latter compd., the amino group of the diaminosuberic acid residue was **acylated** with A(1-6), and the resulting "U-peptide" sequentially elongated with the C-terminal A- and finally B-chain sequences. The conversion of the product into the disulfide moiety gave a mixt. which could not be resolved by currently available methods. However, the low biol. activity of the crude product indicates that the A7-B7 disulfide bond is not crucially important for the activity of insulin.

IT 126758-97-2

RL: RCT (Reactant); RACT (Reactant or reagent)

(peptide coupling of, with polymer-bound dicarbainsulin fragment)

IT 132167-71-6P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(prepn. and peptide coupling of, with insulin A-chain fragment)

IT 132167-76-1P

RL: SPN (Synthetic preparation); PREP (Preparation)

(prepn. and protection of hydrazide group of)

=> select hit rn 113 1-4

E8 THROUGH E19 ASSIGNED

=> fil reg

FILE 'REGISTRY' ENTERED AT 18:57:38 ON 28 JUL 2003

USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.

PLEASE SEE "HELP USAGETERMS" FOR DETAILS.

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Property values tagged with IC are from the ZIC/VINITI data file provided by InfoChem.

STRUCTURE FILE UPDATES: 27 JUL 2003 HIGHEST RN 556005-78-8
 DICTIONARY FILE UPDATES: 27 JUL 2003 HIGHEST RN 556005-78-8

TSCA INFORMATION NOW CURRENT THROUGH JANUARY 6, 2003

Please note that search-term pricing does apply when
 conducting SmartSELECT searches.

Crossover limits have been increased. See HELP CROSSOVER for details.

Experimental and calculated property data are now available. See HELP
 PROPERTIES for more information. See STNote 27, Searching Properties
 in the CAS Registry File, for complete details:

<http://www.cas.org/ONLINE/STN/STNOTES/stnotes27.pdf>

=>

=>

=> s e8-e19

1 126758-97-2/BI
 (126758-97-2/RN)

1 132167-71-6/BI
 (132167-71-6/RN)

1 132167-76-1/BI
 (132167-76-1/RN)

1 253597-47-6/BI
 (253597-47-6/RN)

1 286410-19-3/BI
 (286410-19-3/RN)

1 332350-87-5/BI
 (332350-87-5/RN)

1 474526-71-1/BI
 (474526-71-1/RN)

1 474526-72-2/BI
 (474526-72-2/RN)

1 474526-73-3/BI
 (474526-73-3/RN)

1 474526-74-4/BI
 (474526-74-4/RN)

1 474526-78-8/BI
 (474526-78-8/RN)

1 474526-96-0/BI
 (474526-96-0/RN)

L19 12 (126758-97-2/BI OR 132167-71-6/BI OR 132167-76-1/BI OR 253597-47-
 -6/BI OR 286410-19-3/BI OR 332350-87-5/BI OR 474526-71-1/BI OR
 474526-72-2/BI OR 474526-73-3/BI OR 474526-74-4/BI OR 474526-78-
 8/BI OR 474526-96-0/BI)

=> s 119 and 12

L20 11 L19 AND L2

=> d .seq 120 1-11

L20 ANSWER 1 OF 11 REGISTRY COPYRIGHT 2003 ACS on STN

RN 474526-96-0 REGISTRY

CN L-Tyrosine, N-(1-oxotetradecyl)glycylglycyl-L-isoleucyl-L-valyl-L-.alpha.-
 glutamyl-L-.alpha.-glutamyl-L-tyrosyl-L-glutaminy-L-leucyl-L-prolyl-
 (9CI) (CA INDEX NAME)

OTHER NAMES:

CN 21: PN: US20020165150 SEQID: 21 claimed protein

NTE modified (modifications unspecified)

| type | location | description |
|--------------|----------|---------------------------|
| modification | Gly-1 - | undetermined modification |

SQL 11

RN 474526-96-0 REGISTRY

SEQ 1 GGIVEEYQLP Y

====

HITS AT: 2-5

RELATED SEQUENCES AVAILABLE WITH SEQLINK

REFERENCE 1: 137:346244

L20 ANSWER 2 OF 11 REGISTRY COPYRIGHT 2003 ACS on STN

RN 474526-78-8 REGISTRY

CN L-Phenylalanine, N-(1-oxooctadecyl)glycylglycyl-L-isoleucyl-L-valyl-L-.alpha.-glutamyl-L-.alpha.-aspartyl-L-tyrosyl-L-arginyl-L-prolyl-L-prolyl-(9CI) (CA INDEX NAME)

OTHER NAMES:

CN 10: PN: US20020165150 SEQID: 10 claimed protein

NTE modified (modifications unspecified)

| type | location | description |
|--------------|----------|---------------------------|
| modification | Gly-1 - | undetermined modification |

SQL 11

RN 474526-78-8 REGISTRY

SEQ 1 GGIVEDYRPP F

====

HITS AT: 2-5

RELATED SEQUENCES AVAILABLE WITH SEQLINK

REFERENCE 1: 137:346244

L20 ANSWER 3 OF 11 REGISTRY COPYRIGHT 2003 ACS on STN

RN 474526-74-4 REGISTRY

CN L-Proline, N-(1-oxotetradecyl)glycyl-L-valyl-L-asparaginyglycyl-L-isoleucyl-L-valyl-L-.alpha.-glutamyl-L-.alpha.-aspartyl-L-tyrosyl-L-arginyl- (9CI) (CA INDEX NAME)

OTHER NAMES:

CN 6: PN: US20020165150 SEQID: 6 claimed protein

NTE modified (modifications unspecified)

| type | location | description |
|--------------|----------|---------------------------|
| modification | Gly-1 - | undetermined modification |

SQL 11

RN 474526-74-4 REGISTRY

SEQ 1 GVNGIVEDYR P

====

HITS AT: 4-7

REFERENCE 1: 137:346244

L20 ANSWER 4 OF 11 REGISTRY COPYRIGHT 2003 ACS on STN

RN 474526-73-3 REGISTRY

CN L-Proline, N-(1-oxotetradecyl)glycylglycyl-L-isoleucyl-L-valyl-L-.alpha.-glutamyl-L-.alpha.-aspartyl-L-tyrosyl-L-arginyl- (9CI) (CA INDEX NAME)

OTHER NAMES:

CN 5: PN: US20020165150 SEQID: 5 claimed protein

NTE modified (modifications unspecified)

| type | location | description |
|--------------|----------|---------------------------|
| modification | Gly-1 | undetermined modification |

SQL 9

RN 474526-73-3 REGISTRY

SEQ 1 GGIVEDYRP

=====

HITS AT: 2-5

REFERENCE 1: 137:346244

L20 ANSWER 5 OF 11 REGISTRY COPYRIGHT 2003 ACS on STN

RN 474526-72-2 REGISTRY

CN L-Prolinamide, N-(1-oxotetradecyl)glycylglycyl-L-isoleucyl-L-valyl-L-.alpha.-glutamyl-L-.alpha.-aspartyl-L-tyrosyl-L-arginyl-L-prolyl- (9CI) (CA INDEX NAME)

OTHER NAMES:

CN 4: PN: US20020165150 SEQID: 4 claimed protein

NTE modified

| type | location | description |
|---------------|----------|---------------------------|
| terminal mod. | Pro-10 | C-terminal amide |
| modification | Gly-1 | undetermined modification |

SQL 10

RN 474526-72-2 REGISTRY

SEQ 1 GGIVEDYRPP

=====

HITS AT: 2-5

REFERENCE 1: 137:346244

L20 ANSWER 6 OF 11 REGISTRY COPYRIGHT 2003 ACS on STN

RN 474526-71-1 REGISTRY

CN L-Phenylalanine, N-(1-oxotetradecyl)glycylglycyl-L-isoleucyl-L-valyl-L-.alpha.-glutamyl-L-.alpha.-aspartyl-L-tyrosyl-L-arginyl-L-prolyl-L-prolyl- (9CI) (CA INDEX NAME)

OTHER NAMES:

CN 3: PN: US20020165150 SEQID: 3 claimed protein

NTE modified (modifications unspecified)

| type | location | description |
|--------------|----------|---------------------------|
| modification | Gly-1 | undetermined modification |

SQL 11

RN 474526-71-1 REGISTRY

SEQ 1 GGIVEDYRPP F

=====

HITS AT: 2-5

RELATED SEQUENCES AVAILABLE WITH SEQLINK

REFERENCE 1: 137:346244

L20 ANSWER 7 OF 11 REGISTRY COPYRIGHT 2003 ACS on STN
 RN 286410-19-3 REGISTRY
 CN Peptide, (Gly-Ile-Val-Glu-Gln-Cys-Cys-Thr-Ser-Ile-Cys-Ser-Leu-Tyr-Gln-Leu-Glu-Asn-Tyr-Cys-Xaa-Xaa) (9CI) (CA INDEX NAME)

OTHER NAMES:

CN 1: PN: W00043512 SEQID: 1 claimed protein

NTE

| type | location | | | description |
|----------|----------|---|---|-------------|
| uncommon | Aaa-21 | - | - | |
| uncommon | Aaa-22 | - | - | |

SQL 22

RN 286410-19-3 REGISTRY

SEQ 1 GIVEQCCTSI CSLYQLENYC XX

====

HITS AT: 1-4

REFERENCE 1: 133:140232

L20 ANSWER 8 OF 11 REGISTRY COPYRIGHT 2003 ACS on STN
 RN 253597-47-6 REGISTRY
 CN 1: PN: US6011007 SEQID: 1 unclaimed protein (9CI) (CA INDEX NAME)

NTE

| type | location | | | description |
|----------|----------|---|---|-------------|
| uncommon | Aaa-21 | - | - | |

SQL 21

RN 253597-47-6 REGISTRY

SEQ 1 GIVEQCCTSI CSLYQLENYC X

====

HITS AT: 1-4

REFERENCE 1: 132:73648

L20 ANSWER 9 OF 11 REGISTRY COPYRIGHT 2003 ACS on STN
 RN 132167-76-1 REGISTRY
 CN Glycine, N-[(phenylmethoxy)carbonyl]-L-phenylalanyl-L-valyl-L-asparaginyll-L-glutaminyll-L-histidyl-L-leucyl-7-carboxy-N7-[N-[N2-[N-[N-[N-[N-[(1,1-dimethylethoxy)carbonyl]glycyl]-L-isoleucyl]-L-valyl]-L-.alpha.-glutamyl]-L-glutaminyll]-3-[(1,1-dimethylethyl)dithio]-L-alanyl]-L-2,7-diaminoheptanoyl-, 7(5)-(1,1-dimethylethyl) ester, 8-hydrazide (9CI) (CA INDEX NAME)

NTE multichain

modified (modifications unspecified)

| type | location | | | description |
|----------|----------|---|--------|--------------|
| bridge | Dsu-7 | - | Leu-6' | amide bridge |
| uncommon | Dsu-7 | - | - | |

SQL 14,8,6

RN 132167-76-1 REGISTRY

SEQ 1 GIVEQCXG

HITS AT: 1-4

RELATED SEQUENCES AVAILABLE WITH SEQLINK

REFERENCE 1: 114:102773

L20 ANSWER 10 OF 11 REGISTRY COPYRIGHT 2003 ACS on STN

RN 132167-71-6 REGISTRY

CN Glycine, N-[(phenylmethoxy)carbonyl]-L-phenylalanyl-L-valyl-L-asparaginyl-L-glutaminyl-L-histidyl-L-leucyl-7-carboxy-N7-[N-[N2-[N-[N-[N-[N-[(1,1-dimethylethoxy)carbonyl]glycyl]-L-isoleucyl]-L-valyl]-L-.alpha.-glutamyl]-L-glutaminyl]-3-[(1,1-dimethylethyl)dithio]-L-alanyl]-L-2,7-diaminoheptanoyl-, 7(5)-(1,1-dimethylethyl) ester, 8-[2-[2-[4-(methylsulfonyl)phenyl]sulfonyl]ethoxy]carbonyl]hydrazide] (9CI) (CA INDEX NAME)

NTE multichain
modified (modifications unspecified)

| type | location | description |
|----------|----------------|--------------|
| bridge | Dsu-7 - Leu-6' | amide bridge |
| uncommon | Dsu-7 - | - |

SQL 14,8,6

RN 132167-71-6 REGISTRY

SEQ 1 GIVEQCXG

HITS AT: 1-4

RELATED SEQUENCES AVAILABLE WITH SEQLINK

REFERENCE 1: 114:102773

L20 ANSWER 11 OF 11 REGISTRY COPYRIGHT 2003 ACS on STN

RN 126758-97-2 REGISTRY

CN L-Alanine, N-[N2-[N-[N-[N-[N-[(1,1-dimethylethoxy)carbonyl]glycyl]-L-isoleucyl]-L-valyl]-L-.alpha.-glutamyl]-L-glutaminyl]-3-[(1,1-dimethylethyl)dithio]-, 5-(1,1-dimethylethyl) ester (9CI) (CA INDEX NAME)

NTE modified (modifications unspecified)

| type | location | description |
|--------------|----------|------------------------------------|
| modification | Gly-1 - | (1,1-dimethylethoxy) carbonyl<Boc> |
| modification | Glu-4 - | 1,1-dimethylethyl<t-Bu> |
| modification | Cys-6 - | (1,1-dimethylethyl)thio |

SQL 6

RN 126758-97-2 REGISTRY

SEQ 1 GIVEQC

HITS AT: 1-4

RELATED SEQUENCES AVAILABLE WITH SEQLINK

REFERENCE 1: 114:102773

REFERENCE 2: 112:199075